Message

From: Clements, Mindy [clements.mindy@epa.gov]
Sent: 4/6/2021 5:51:36 PM
To: Stralka, Daniel [Stralka.Daniel@epa.gov]
CC: Abreu, Lilian [abreu.lilian@epa.gov]
Subject: RE: HPNS project

Hi Dan,
Lilian's time is tied up the next two weeks. Can you let me know if she can start working with you after that on this project or if this project is going to resolve in these coming two weeks?

Thank you, Mindy Clements (she/her), R9SEMD, 415-972-3169

From: Abreu, Lilian <abreu.lilian@epa.gov>
Sent: Monday, April 5, 2021 9:51 AM
To: Stralka, Daniel <Stralka.Daniel@epa.gov>
Cc: Clements, Mindy <clements.mindy@epa.gov>
Subject: RE: HPNS project

Sorry Dan, I really can't, I really have a very time critical project to work on, you can check with Mindy about it if you will.

From: Stralka, Daniel <Stralka.Daniel@epa.gov>
Sent: Monday, April 5, 2021 9:48 AM
To: Abreu, Lilian <abreu.lilian@epa.gov>
Subject: RE: HPNS project

Lilian can we talk at 2;30 today?

From: Abreu, Lilian <abreu.lilian@epa.gov>
Sent: Monday, April 5, 2021 9:45 AM
To: Stralka, Daniel <Stralka.Daniel@epa.gov>
Cc: Clements, Mindy <clements.mindy@epa.gov>
Subject: RE: HPNS project
Importance: High

Good morning Dan,

I have being assigned a few tasks that are critical and will require my full attention in the next coming weeks. Because of that I won't be able to work with you on the Hunters Point project. I sincerely appreciate you thinking of giving me that opportunity, unfortunately the detail time is very short and won't allow me to get involved with that project at this time.

Thanks again,

Lilian Abreu, PhD
Environmental Engineer
US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105
Tel. 415.972-3010

abreu.lilian@epa.gov

From: Abreu, Lilian
Sent: Thursday, April 1, 2021 9:12 AM
To: Stralka, Daniel <Stralka.Daniel@epa.gov>
Cc: Clements, Mindy <clements.mindy@epa.gov>
Subject: RE: HPNS project

Thanks Dan,
This week is already full, I got other commitments on other projects/tasks. I will talk to you next week. I will send an invite.

I understand he is focusing on the parameters for the equation below and we can further discuss the task approach. it would help our discussion next week to know where we stand on the questions I listed in the attached outline; that will help me further understand the potential discrepancies between the model calculations.

Talk to you next week

Lilian

From: Stralka, Daniel <Stralka.Daniel@epa.gov>
Sent: Thursday, April 1, 2021 7:48 AM
To: Abreu, Lilian <abreu.lilian@epa.gov>
Subject: FW: HPNS project

I got a clearer picture from Wayne with a clear question. Do you have time to talk today?

From: Praskins, Wayne <Praskins.Wayne@epa.gov>
Sent: Wednesday, March 31, 2021 2:32 PM
To: Stralka, Daniel <Stralka.Daniel@epa.gov>
Subject: HPNS project

Dan –

We've discussed a project in which someone would examine the level of conservatism associated with the methodology and default values used in the BPRG calculator to estimate exposure via the ingestion pathway. The BPRG calculator generates PRGs for radiological contamination on an interior building surface. For residential exposure, our media and pathway of interest ("settled dust") are described in Section 4.1.1 of the BPRG User's Guide (attached). As can be seen in the ingestion equation in Section 4.1.1, exposure via ingestion is estimated as the product of a number of parameters. The parameters I've focused on are FTSS, SE, SA, and FQ.

$$IFD_{res\text{-}adj}\left(3{,}200{,}400\ cm^2\right) = \left\{\begin{array}{l}\left\{\left[\left(FTSS_h(0.5)\times EF_{res\text{-}c}\left(\frac{350\ days}{year}\right)\times ET_{res\text{-}c,h}\left(\frac{6\ hours}{day}\right)\right)+\left(FTSS_s(0.1)\times EF_{res\text{-}c}\left(\frac{350\ days}{year}\right)\times ET_{res\text{-}c,s}\left(\frac{10\ hours}{day}\right)\right)\right]\times\right.\\ \left.SE(0.5)\times ED_{res\text{-}c}(6\ years)\times SA_{res\text{-}c}\left(\frac{16\ cm^2}{event}\right)\times FQ_c\left(\frac{17\ events}{hour}\right)\right\}+\\ \left\{\left[\left(FTSS_h(0.5)\times EF_{res\text{-}a}\left(\frac{350\ days}{year}\right)\times ET_{res\text{-}a,h}\left(\frac{6\ hours}{day}\right)\right)+\left(FTSS_s(0.1)\times EF_{res\text{-}a}\left(\frac{350\ days}{year}\right)\times ET_{res\text{-}a,s}\left(\frac{10\ hours}{day}\right)\right)\right]\times\right.\\ \left.SE(0.5)\times ED_{res\text{-}a}(20\ years)\times SA_{res\text{-}a}\left(\frac{49\ cm^2}{event}\right)\times FQ_a\left(\frac{3\ events}{hour}\right)\right\}\end{array}\right)$$

FTSS = Fraction Transferred Surface to Skin (unitless) (allow different values for hard and soft surfaces)

SE = Saliva Extraction Factor (unitless)
SA= Surface Area of Fingers (cm2) (allows different values for adult and child)
FQ = Frequency of Hand to Mouth (hr-1) (allows different values for adult and child)

Parameter descriptions, default values, and references for the default values are provided in Section 5 (Table 1) in the User's Guide.

We specifically discussed looking at the impact of the BPRG approach of estimating exposure as the product of the individual parameters.

The User's Guide, the online BPRG calculator, and related information is available at https://epa-bprg.ornl.gov

Wayne Praskins | Superfund Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne St. (SFD-7-3)
San Francisco, CA 94105
415-972-3181